CLAIMS

1. A spectacle lens supply method, in which a computer is set up on a spectacle lens order side and a computer that is connected to this order-side computer such that information can be mutually exchanged is provided on the manufacturer side, and spectacle lenses are supplied by having the order-side computer and the manufacturer-side computer perform computations according to specific input operations and perform the processing required for the taking and/or placing of orders for spectacle lenses while exchanging information with each other,

characterized in that when spectacle lens information, spectacle frame information, prescription values, layout information, processing instructions information, and other such processing condition data required for processing is transmitted by the order-side computer to the manufacturer-side computer, a lens design program installed on the manufacturer-side computer performs optical lens design tailored to the customer on the basis of the transmitted data for lens information so that the optical performance of the left and right lenses will be similar, and the lenses are manufactured according to this design.

2. The spectacle lens supply method according to Claim 1, wherein the lens design program further performs

optical lens design that approximates the left and right base curves to each other.

3. The spectacle lens supply method according to Claim 1, wherein the optical performance consists of at least one of astigmatism, curvature of field, and distortion.

4. The spectacle lens supply method according to Claim 1, comprising the steps of:

selecting the left and right lenses from a lens design table prepared on the basis of prescription values when the lens design program approximates the optical performance of the left and right eyes to each other;

comparing the convex surface base curve difference between the selected left and right lenses; and

when this base curve difference is over a predetermined standard, performing lens redesign in which the convex surface curve of one lens is made to have an aspherical shape similar to that of the convex surface curve of the other lens so that the astigmatism is substantially the same.

5. The spectacle lens supply method according to Claim 2, wherein the optical lens design is such that the difference in convex surface base curves of the left and right spectacle lenses is no more than 1 D.

6. The spectacle lens supply method according to Claim 2, wherein a display means for comparing data including the lens shape before the curve matching and the prescription data for this lens, to data including the lens shape after the curve matching and the prescription data for this lens, is transferred to and displayed at the computer set up on the side where spectacle lens is ordered.

7. A spectacle lens supply system, comprising a computer set up on a spectacle lens order side and a manufacturer-side computer that is information exchangeably connected to this order-side computer and has a customer database including spectacle lens prescription data and lens design data,

in which the order-side computer and the manufacturer-side computer perform computations according to specific input operations and perform the processing required for the taking and/or placing of orders for spectacle lenses while exchanging information with each other,

wherein the manufacturer-side computer has the function of performing lens design such that a customer will experience substantially no discomfort originating in an optical performance difference when changing from old to new lenses, by selecting or producing new design data for a lens on the basis of customer spectacle lens processing condition data required for processing, such as spectacle lens information, spectacle frame information, prescription

values, layout information, and processing instructions information, when this data is transmitted from the order-side computer to the manufacturer-side computer, and making the optical performance of the new lenses produced with this new design data approximate the optical performance of the old lenses produced with the old design data based on the old prescription values of the pre-registered customer database.

8. A spectacle lens supply system, comprising a computer set up on a spectacle lens order side and a manufacturer-side computer that is information exchangeably connected to this order-side computer and has a customer database including spectacle lens prescription data and lens design data,

in which the order-side computer and the manufacturer-side computer perform computations according to specific input operations and perform the processing required for the taking and placing of orders for spectacle lenses while exchanging information with each other,

wherein, when customer spectacle lens processing condition data required for processing, such as spectacle lens information, spectacle frame information, prescription values, layout information, and processing instructions information, is transmitted from the order-side computer to the manufacturer-side computer, the manufacturer-side

computer has the function of performing processing comprising:

a step of checking whether there is any old prescription data for that customer;

a step of selecting or producing lens design data matching the new prescription values as lens design data for the new prescription values if no old data for that customer exists in the manufacturer-side computer, and setting this data as the design data for producing the new lenses;

an optical performance comparison step in which, if there is old prescription data for the customer, the new lens design data for the new prescription values is selected or produced, and the optical performance of the new lenses designed on the basis of the newly selected or produced new design data is compared to the optical performance of the old lenses designed with the old design data matching the old prescription values; and

a step in which, when the results of comparing the optical performance as above indicate that the optical performance difference is within a range such that the customer will experience substantially no discomfort originating in an optical performance difference when changing from old to new lenses, the selected or produced new design data is set as the design data for producing the new lenses, and when said difference goes outside a range in which the customer will experience substantially no discomfort originating in an optical performance difference

when changing from old to new lenses, new design data is newly selected or produced for putting the optical performance difference within said range before returning to said optical performance comparison step and such processing is repeated until the optical performance difference is within said range.

9. The spectacle lens supply system according to Claim 7 or 8, wherein the newly determined new design data is registered for the first time or updated in the customer database.

10. The spectacle lens supply system according to Claim 7 or 8, wherein, when there is old prescription data for the customer, a step is provided for comparing the difference between the old and new prescription values, and if this difference is not over 0.5 D as the diopter difference, the new lens design data for the new prescription values is selected or produced without performing the optical performance comparison step, and this data is set as the design data for producing the new lenses.

11. The spectacle lens supply system according to Claim 7 or 8, wherein the lens design data is such that the difference in the curve of a first refractive surface of the left and right spectacle lenses is no more than 1 D.

12. The spectacle lens supply system according to Claim 7 or 8, wherein the optical performance is at least one of astigmatism, curvature of field, and distortion.

13. The spectacle lens supply system according to Claim 7 or 8, wherein the curvature of at least one of the first refractive surfaces of the left and right spectacle lenses is selected such that this curved surface will be aspherical.

14. A method for manufacturing a spectacle lens, involving the design and manufacture of left and right spectacle lenses that make up a pair of spectacles in which the prescription including diopter is different for the left and right eyes,

wherein, if there is more than a specific amount of difference in the prescription including diopter between the left and right eyes:

when the refractive surfaces in front of the left and right spectacle lenses are termed the first refractive surfaces and the refractive surfaces on the eye side are termed the second refractive surfaces, in designing the curvature of the curved surfaces of the first and second refractive surfaces of the left and right spectacle lenses, the curvature of the first and second refractive surfaces of at least one of the left and right spectacle lenses is selected so that the left and right spectacle lenses satisfy

their respective prescription conditions including the diopter and so that the difference in the curvature of the first refractive surfaces between the left and right spectacle lenses falls within a specific range.

15. A method for manufacturing a spectacle lens, involving the design and manufacture of left and right spectacle lenses that make up a pair of spectacles in which the prescription including diopter is different for the left and right eyes,

wherein, if there is more than a specific amount of difference in the prescription including diopter between the left and right eyes:

when the refractive surfaces in front of the left and right spectacle lenses are termed the first refractive surfaces and the refractive surfaces on the eye side are termed the second refractive surfaces, in designing the curvature of the curved surfaces of the first and second refractive surfaces of the left and right spectacle lenses, the curvature of the first and second refractive surfaces of at least one of the left and right spectacle lenses is selected so that the left and right spectacle lenses satisfy their respective prescription conditions including the diopter, so that the optical performance of each lens falls within an acceptable range, and so that the difference in the curvature of the first refractive surfaces between the

left and right spectacle lenses falls within a specific range.

16. The method for manufacturing a spectacle lens according to Claim 14 or 15, wherein the difference in the diopter between the left and right eyes is 0.5 D or greater when the diopter prescription out of said prescription including the diopter includes a positive diopter, the difference in the diopter between the left and right eyes is 1 D or greater when the diopter prescription includes a negative diopter, and the difference in the curvature of the first refractive surfaces of the left and right spectacle lenses is no more than 1 D.

17. The method for manufacturing a spectacle lens according to Claim 15, wherein the optical performance consists of at least one of astigmatism, curvature of field, and distortion.

18. The method for manufacturing a spectacle lens according to Claim 15, wherein the curvature of one or both of the first refractive surfaces of the left and right spectacle lenses is selected such that this curved surface will be aspherical.